#### **OEM**

# **MDI-4100** 2D Imager Barcode Scan Engine



### Highlights

- Industry's thinnest (10mm) 2D imager barcode scan engine
- Perfect for integration into small, space constrained mobile, medical, or retail barcode scanning devices
- High performance and low power 800MHz CPU and an ultra-fast 100 frames per second (fps) CMOS imager sensor enable high speeding scanning of 1D and 2D barcodes and OCR fonts
- Fast global shutter technology providing exceptional motion tolerance for moving applications
- Improved scanning of curved, wide, poorly printed and damaged barcodes
- Data editing program function captures up to 16 codes on multiple images simultaneously
- Single line green LED and warm, white LED illumination makes it easy to aim while providing safety and an extended service life
- Low power and an adjustable power consumption to fit your design needs
- Communication interface: USB or RS232
- Engineering kit available enables faster time to market
- Two year warranty protects your investment



## **MDI-4100**

## **Product Specifications**

#### COMMUNICATION (12 PIN FFC CONNECTOR)

Serial TTL, USB

#### POWER

VOLTAGE REQUIREMENT: 3.0 ~ 5.5V CURRENT CONSUMPTION: Typ. 300mA

#### 2D IMAGER OPTICS

LIGHT SOURCE: Aiming green LED, warm white illumination LED

SCAN METHOD: CMOS area sensor, 640 x 480 pixels, black and white

SCAN RATE: Up to 100 fps

READING PITCH ANGLE: -65 to 0°, 0 to +65°

READING SKEW ANGLE: -65 to 0°, 0 to +65°

READING TILT ANGLE: 360°

MINIMUM RESOLUTION AT PCS 0.9: 4 mil (0.1 mm)

#### MINIMUM PCS VALUE: 0.9

FIELD OF VIEW: Horizontal: 38°

Vertical: 28.9°

#### DEPTH OF FIELD AT QR CODE:

6.7 mil (0.169mm) 2.52 - 4.17 in (64 - 106 mm) 15 mil (0.381mm) 1.18 - 9.21 in (30 - 234 mm)

#### DEPTH OF FIELD AT CODE 39:

5 mil (0.127 mm) 2.05 - 4.96 in (52 - 126 mm) 10 mil (0.254 mm) 1.81 - 9.68 in (46 - 246 mm) 20 mil (0.508 mm) 2.36 - 18.35 in (60 - 466 mm)

#### SUPPORTED SYMBOLOGIES

BARCODE (1D): JAN/UPC/EAN including add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), IATA, Industrial 2 of 5, Interleaved 2 of 5, ISBN-ISSN-ISMN, Matrix 2 of 5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/ Plessey

BARCODE (2D): Aztec Code, Aztec Runes, Chinese Sensible Code, Codablock F, Composite Codes, Data Matrix (ECC200), DotCode, Passport MRZ (OCR-B), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code, PDF417, QR Code

BARCODE (POSTAL CODES): Chinese Post, Intelligent Mail Barcode, Korean Postal Authority Code, POSTNET

#### DURABILITY

#### TEMPERATURE:

Operation: -22 to 140 °F (-30 to 60 °C) Storage: -40 to 158 °F (-40 to 70 °C)

#### HUMIDITY:

Operation: 5 - 90% (non-condensing) Storage: 5 - 90% (non-condensing

#### AMBIENT LIGHT IMMUNITY:

Fluorescent: 10,000 lx max Direct sun: 100,000 lx max Incandescent: 10,000 lx max

DROP TEST: Packed in dummy case 5,2 ft (1.8 m) drop onto concrete surface MTBF: 50,000 hours

#### PHYSICAL MDI-4100

DIMENSIONS (WXHXD): 1.0 x 0.39 x 0.83 in (25.3 x 10.0 x 21.0 mm) WEIGHT BODY: 0.19 oz (Ca. 5.5 g)

#### REGULATORY AND SAFETY

RoHS, IEC62471

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